

IMPLANT WITH A SKIN PENETRATION SECTION

IN THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in this application:

Claims 1 through 23: (Canceled)

24. (New) An implant with an implant body (1), comprising an implant section (5) intended to remain in the body, a skin penetration section (6), and an extracorporeal connector section (7), and with a planar part (8) which surrounds the skin penetration section (6), is provided for adhering to skin tissue and has a surface forming a support for a skin layer (4) surrounding the skin penetration section (6), characterized in that the planar part (8) adjoins the skin penetration section (6) in a sterile manner and comprises, in one integral piece, an inner area (9) adjoining the skin penetration section (6), and an outer area (10), the inner area (9) being made so stiff that it forms an inherently fixed support surface for a skin layer (4) surrounding the skin penetration section (6), and the outer area (10) has an elasticity adapted to the elasticity of the surrounding tissue.

25. (New) The implant of claim 24, characterized in that the implant body (1) is a load-bearing part whose implant section (5) is designed as an anchoring section, and whose connector section (6) is designed for attachment of a load, in particular of a prosthesis.
26. (New) The implant of claim 24, characterized in that the elasticity of the planar part (8) increases continuously toward the outside.
27. (New) The implant of claim 24, characterized in that the planar part (8) is made of silicone.
28. (New) The implant of claim 24, characterized in that the planar part (8) is formed from several individual pieces.
29. (New) The implant of claim 24, characterized in that the planar part (8) has a multiplicity of through-openings (19, 19').
30. (New) The implant of claim 24, characterized in that at least one surface of the plate-like part (8) is provided with groove-like depressions (20, 21) or with webs.
31. (New) The implant of claim 24, characterized in that shaped elements (23, 24, 25, 26) promoting the anchoring of tissue are applied at least on one part of at least one surface of the planar part (8).
32. (New) The implant of claim 24, characterized in that the surface of the planar part (8) has, at least in some areas, a porous, net-like or roughened structure.

33. (New) The implant of claim 24, characterized in that the surface is provided with substances that promote the adherence of tissue.
34. (New) The implant of claim 24, characterized in that the planar part (8) has a substantially circular periphery.
- ~~35. (New) The implant of claim 24, characterized in that the planar part (8) adjoins the implant body (1) substantially at right angles to a longitudinal axis of the implant body (1).~~
36. (New) The implant of claim 24, characterized in that the planar part (8) is shaped like the top of a mushroom, with a jacket surface forming an acute angle with respect to a longitudinal axis of the implant body (1).
37. (New) The implant of claim 24, characterized in that the planar part (8) is coated with bioactive material at least on one part of its surface.
38. (New) The implant of claim 37, characterized in that the surface is coated in an island pattern with interstices.
39. (New) The implant of claim 24, characterized in that the planar part (8) is connected releasably to the implant body (1).
40. (New) The implant of claim 24, characterized in that, in order to receive the planar part (8), the implant body (1) has a stepped diameter reduction forming an annular shoulder (12).

41. (New) The implant of claim 40, characterized in that the sterile connection is produced by laying the planar part (8) flat on the annular shoulder (12) of the implant body (1) with axial pretensioning.
42. (New) The implant of claim 24, characterized in that the sterile connection is produced by a peripheral adhesive or weld filling the gap between the implant body (1) and the planar part (8).
43. (New) The implant of claim 24, characterized in that the implant body (1) is provided with a bioactive surface at least in the area of connection to the distal surface of the planar part (8).
44. (New) The implant of claim 24, characterized in that the implant body is provided, in its connector section (7), with a surface that prevents microorganisms settling on it.
45. (New) The implant of claim 24, characterized in that several implant bodies (1) are connected to a common planar part (8).
46. (New) The implant of claim 24, characterized in that, starting from an implant section (5), the implant body (1) branches into several skin penetration sections (6) which are connected to planar parts (8).